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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/933,535

08/20/2001

Edward O. Shaffer II

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7590

12/20/2005

THE DOW CHEMICAL COMPANY
INTELLECTUAL PROPERTY SECTION
P. O. BOX 1967
MIDLAND, MI 48641-1967

EXAMINER

SARKAR, ASOK K

ART UNIT

PAPER NUMBER

2891

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/933,535	SHAFFER ET AL.	
	Examiner	Art Unit	
	Asok K. Sarkar	2891	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-28 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-28 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/18/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on November 18, 2005 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —(

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 24 – 28 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugita, US 6,576,393.

Regarding claim 24, Sugita teaches a composition comprising the hydrolyzed or partially hydrolyzed product of a combination of silanes comprising

(a) an alkoxysilane or acyloxy silane having at least one hydrocarbon

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group attached directly to the Si atom which hydrocarbon group contains a non-aromatic, unsaturated carbon to carbon bond in an 50 to 95 mole percent based on total moles of silanes present, and

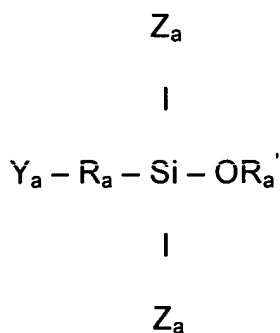
(b) an alkoxy silane or acyloxy silane having at least one hydrocarbon group attached directly to the Si atom which hydrocarbon group includes an aromatic ring in between column 1, line, 60 and column 5, line 42.

Regarding claim 25, Sugita teaches the composition combination further comprises (c) an alkoxy silane or acyloxy silane having at least one C₁ - C₆ alkyl group attached directly to the Si atom, a compound methyltrimethoxy silane in between column 1, line, 60 and column 5, line 42 specially in column 5, lines 40 – 42.

Regarding claim 26, Sugita teaches the composition wherein the first silane (a) is a vinyl acetoxy silane, vinyltrimethoxysilane, and the second silane (b) is an arylalkoxy silane, phenyltrimethoxysilane in column 2, lines 62 – 65 and column 3, lines 60 – 63.

Regarding claim 27, Sugita teaches the composition wherein combination comprises

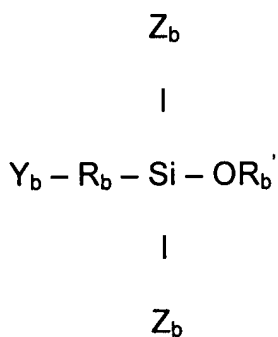
(a) 50 – 95 mole% silanes of the formula



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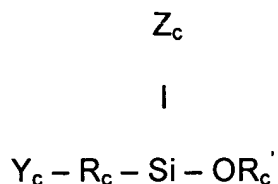
wherein R_a is $C_1 - C_6$ alkylidene, $C_1 - C_6$ alkylene, arylene, or a direct bond; Y_a is $C_1 - C_6$ alkyl, $C_1 - C_6$ alkenyl, C_{2-6} alkynyl, $C_6 - C_{20}$ aryl, 3-methacryloxy, 3-acryloxy, 3-nminoethyl-nmino, 3-nmino, $-\text{SiZ}_a\text{OR}_a'$, or $-\text{OR}_a'$; R_a' is independently, in each occurrence, a $C_1 - C_6$ alkyl or $C_2 - C_6$ acyl; and Z_a is $C_1 - C_6$ alkyl, $C_2 - C_6$ alkenyl, C_{2-6} alkynyl, C_{6-20} aryl, or $-\text{OR}_a'$, provided at least one of Z_a or the combination R_a-Y_a comprises a non-aromatic carbon to carbon bond unsaturation,

(b) 5 to 40 mole percent



wherein R_b is $C_1 - C_6$ alkylidene, $C_1 - C_6$ alkylene, arylene, or a direct bond; Y_b is $C_1 - C_6$ alkyl, $C_2 - C_6$ alkenyl, $C_2 - C_6$ alkynyl, $C_6 - C_{20}$ aryl, 3-methacryloxy, 3-acryloxy, 3-nminoethyl-nmino, 3-amino, $-\text{SiZ}_b\text{OR}_b'$, or $-\text{OR}_b'$; R_b' is independently, in each occurrence, a $C_1 - C_6$ alkyl or $C_2 - C_6$ acyl; and Z_b is $C_1 - C_6$ alkyl, $C_2 - C_6$ alkenyl, C_{2-6} alkynyl, C_{6-20} aryl, or $-\text{OR}_b'$, provided at least one of Z_b or the combination of R_b-Y_b comprises an aromatic ring, and

(c) 0 to 45 mole percent



I

Z_c

wherein R_c is $C_1 - C_6$ alkylidene, $C_1 - C_6$ alkylene, arylene, or a direct bond; Y_c is $C_1 - C_6$ alkyl, $C_2 - C_6$ alkenyl, C_{2-6} alkynyl a $C_6 - C_{20}$ aryl, 3-methacryloxy, 3-acryloxy, 3-nminoethyl-amino, 3-amino, $-SiZ_{c2}OR_c'$, or $-OR_c'$; R_c' is independently, in each occurrence, a $C_1 - C_6$ alkyl or $C_2 - C_6$ acyl ; and Z_c is $C_1 - C_6$ alkyl, $C_2 - C_6$ alkenyl, C_{2-6} alkynyl, C_{6-20} aryl, or $-OR_c'$, provided at least one of Z_c or the combination of $R_c - Y_c$ comprises an alkyl in between column 5, line 45 – column 6, line 43.

Regarding claim 28, Sugita teaches the composition is an adhesion promoter since he teaches the composition is for adhesion in column 5, lines 43 – 45.

Regarding claim 32, Sugita teaches the composition is cured at temperatures of at least 180°C in column 8, lines 44 – 48.

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asok K. Sarkar whose telephone number is 571 272 1970. The examiner can normally be reached on Monday - Friday (8 AM- 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William B. Baumeister can be reached on 571 272 1722. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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3. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Asok K. Sarkar
December 15, 2005

Primary Examiner